

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD and
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

Case No. 2:22-CV-00422-JRG-RSP

**SAMSUNG’S MOTION TO STRIKE “BATTERY TESTING”
OPINIONS OFFERED BY DR. RICHARD D. WESEL**

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EXHIBIT INDEX & NOTES

Exhibit	Description
1	Excerpts from the Expert Report of Dr. Richard D. Wesel, dated March 29, 2024
2	Excerpts from the Deposition of Dr. Richard D. Wesel, taken April 30, 2024
3	Excerpts from the Deposition of Dr. Richard D. Wesel, taken May 1, 2024
4	Galaxy S5 16GB - Black - Unlocked _ Back Market - Battery Capacity
5	Galaxy S5 16GB - Black - Unlocked _ Back Market
6	Excerpts from the Rebuttal Report of Dr. Dan Schonfeld, dated April 19, 2024
7	Excerpts from the Deposition of Gregory Raleigh, taken November 15, 2023
8	Exhibit C (Materials Considered) from the Expert Report of Dr. Richard D. Wesel, dated March 29, 2024

* Emphasis added unless otherwise noted.

** Form objections are omitted from deposition transcript quotations unless otherwise noted.

*** In this brief, “Headwater” refers to Plaintiff and its purported predecessors.

I. INTRODUCTION

Defendants Samsung Electronics Co., Ltd. (“SEC”) and Samsung Electronics America, Inc. (“SEA”) respectfully move the Court to strike certain “battery testing” opinions offered in the Report of Plaintiff Headwater Research, LLC’s infringement expert, Dr. Richard D. Wesel.

Dr. Wesel’s alleged “battery testing,” Ex. 1, ¶¶ 2362-81, which was performed (mostly by an unknown “consultant,” who is likely one of Headwater’s counsel at Russ August & Kabat) “[t]o quantify the battery savings benefits from the patented technologies,” is inherently unreliable and should be stricken. *Id.* at ¶ 2362. Before this case, Dr. Wesel had never looked at Android code, Ex. 2 at 17:11-19, had never “performed battery testing on mobile phones,” had never “done any testing on Android devices,” and had never “done any testing on any smartphones” whatsoever, *id.* at 38:1-14. As such, Dr. Wesel was not qualified to offer the “testing” opinions in his Report.

Even if he were, Dr. Wesel was not involved in setting up the test environment, including purchasing the tested phones, *id.* at 40:19-41:2, 52:1-13, 55:1-3, creating “the Google account for the device,” “download[ing] the applications onto the device,” purchasing and enabling the “cellular plan from AT&T” for the tested devices, *id.* at 48:1-25, or installing “Android Studio” onto the “Windows 10” PC used for the testing, *id.* at 49:1-9. All of this, along with the majority of Dr. Wesel’s alleged “testing,” was actually performed by an unnamed “consultant,” who himself had no previous relevant testing experience, whose qualifications Dr. Wesel did not know, and whose work Dr. Wesel did not oversee. *Id.* at 50:21-51:23, 88:21-89:6, 89:13-90:1.

Exacerbating the inherently unreliable nature of Dr. Wesel’s testing, the same unnamed “consultant”—who is plainly not an expert, has not submitted a report in this litigation, and has not been made available by Headwater for deposition—then compiled all of the test results, only “a few” of which Dr. Wesel even bothered to check. Ex. 3 at 286:18-287:12. And, at deposition, Dr. Wesel could not recall which cases he checked, could not find the answer in his Report, nor

could he demonstrate his ability to check the data. *Id.* at 286:18-288:11.

Regarding the test itself, Dr. Wesel claims to have used a [REDACTED], [REDACTED], to test the alleged battery saving benefits of Power Saving Mode. Ex. 1, ¶ 2363. However, Dr. Wesel admitted during deposition that: [REDACTED]

[REDACTED]. Ex. 2 at 81:23-82:2, 85:7-10, 86:17-87:5. Moreover, while the [REDACTED] that would significantly impact battery life, Dr. Wesel’s test lasted merely an hour and failed to take into account signal strength, which—unbeknownst to Dr. Wesel—was “poor” for significant periods of his testing. *Id.* at 76:1-8, 93:1-6, 105:9-13; Ex. 1, ¶ 2368; Ex. 3 at 284:8-285:18.

Finally, rather than test all of the various accused products or features, Dr. Wesel personally tested just one phone (i.e., a 10-year old Galaxy S5) and one feature (i.e., Power Saving Mode). Ex. 1, ¶¶ 2362-81. Dr. Wesel then—for no apparent reason other than wanting to finish the test quickly—projected the results of that one test onto dozens of other accused products and features. *Id.* at ¶¶ 2368-78. He did so, despite failing to take into account “power profiles,” cellular modems or [REDACTED], which differ for each accused product, or the differing operations of the various accused features, all of which would undeniably impact any battery drain / alleged battery saving benefits analysis. Ex. 3 at 288:20-289:12, 289:14-25, 292:15-24, 293:2-9.

Dr. Wesel lacked any scientific, technical, or other specialized knowledge that qualified him to perform these tests and his testing methodology, itself, was severely flawed. Accordingly, the Court should strike Dr. Wesel’s opinions concerning his alleged “battery testing.”

II. FACTUAL BACKGROUND

A. Dr. Wesel’s Report

In his Report, Dr. Wesel purported to test two devices, a Galaxy S5 and a Galaxy S21, “[t]o

quantify the battery savings benefits from the patented technologies, including the battery savings directly enabled by the 976 Patent Claim 1 over a device that does not have this technology enabled.” Ex. 1, ¶¶ 2362-81. For the S5, he allegedly did so by looking at “the cellular mobile radio consumption from applications running in the background both without the Power Saving mode [Run 1] and then with the Power Saving mode and the patented technology turned on [Run 2].” *Id.* at ¶ 2366. According to Dr. Wesel, he performed four additional test runs to “verify that the results from the first two runs were not anomalous.” *Id.* at ¶¶ 2366-69. He also claimed in his Report to have performed two test runs for the S21. *Id.* at ¶ 2379.

After calculating the purported battery savings from Power Saving Mode, Dr. Wesel then applied his “test results for the S5 . . . to each of the accused products” by dividing the alleged battery savings “by the appropriate battery capacity.” *Id.* at ¶¶ 2368-70. Similarly, Dr. Wesel opined that his “battery testing results” from Power Saving Mode “also indicate the battery savings provided by the patented technology as it has been implemented for the Doze and App Standby / Adaptive Battery features,” as well as Data Saver. *Id.* at ¶¶ 2372-78. Dr. Wesel thus projected his battery test results relating to one phone (i.e., the S5) and one feature (i.e., Power Saving Mode) onto every other accused product and feature without performing any additional testing.

B. Dr. Wesel’s Deposition

Despite claiming to have set up and performed the alleged “battery testing” himself in his Report, Dr. Wesel conceded during his deposition to having very little involvement. Rather, he testified that the majority of the test setup and testing was performed by a “consultant.” Ex. 2 at 40:19-41:2, 48:1-25, 49:1-9, 50:21-51:9, 52:1-13, 55:1-3. Dr. Wesel testified that he did not select this “consultant” to help him with his testing, *id.* at 88:8-13, and that he could not remember the “consultant’s” name or employer. *Id.* at 41:7-17. Further, Dr. Wesel testified that he did not know what qualifications the “consultant” had, *id.* at 88:21-89:6, and that he only had one conversation

with the “consultant,” which occurred before the tests were performed, *id.* at 52:20-25. Dr. Wesel did not look into where the “consultant” performed the tests, *id.* at 50:21-51:5, did not “inspect the precise setup the consultant used to perform the [test] runs,” *id.* at 51:11-17, 51:21-23, and did not take steps to ensure that the “consultant” maintained the settings properly throughout the testing procedures, *id.* at 89:13-25. Finally, Dr. Wesel testified that it was the “consultant,” not him, that compiled the test results, and that Dr. Wesel checked “a few” of them, but could not remember which ones. Ex. 3 at 286:18-287:12.

III. LEGAL STANDARD

An expert may testify only if “(a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.” Fed. R. Evid. 702; *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 592-93 (1993). The proponent of expert opinions must demonstrate admissibility by a preponderance of the evidence. *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 276 (5th Cir. 1998) (en banc). While “[t]he inquiry envisioned by Rule 702 is . . . a flexible one,” Rule 702 also “assign[s] to the trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert*, 509 U.S. at 597.

“The relevance prong requires . . . demonstrat[ing] that the expert’s ‘reasoning or methodology can be properly applied to the facts in issue.’” *Johnson v. Arkema, Inc.*, 685 F.3d 452, 459 (5th Cir. 2012) (quoting *Curtis v. M & S Petroleum, Inc.*, 174 F.3d 661, 668 (5th Cir. 1999)). “The reliability prong mandates that expert opinion ‘be . . . more than unsupported speculation or subjective belief.’” *Id.* Although a “proponent need not prove . . . that the expert’s testimony is correct . . . she must prove by a preponderance of the evidence that the testimony is

reliable.” *Id.* (quoting *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 276 (5th Cir. 1998) (en banc)).

IV. ARGUMENT

A. Dr. Wesel’s Alleged “Battery Test” Setup Is Inherently Unreliable

“One of the worst abuses in civil litigation is the attempted spoon-feeding of client-prepared and lawyer-orchestrated ‘facts’ to a hired expert who then ‘relies’ on the information to express an opinion.” *Therasense, Inc. v. Becton, Dickinson & Co.*, 2008 WL 2323856, at *1 (N.D. Cal. May 22, 2008). That is precisely what occurred here. Dr. Wesel’s only apparent role in his alleged “battery testing” was plugging a phone into a computer and entering “commands” he was given by others into battery testing software that he had never previously used nor heard of. Ex. 2 at 38:19-39:2, 49:6-12. He did so for just two of the eight test runs included in his Report (the remaining six of which he did not even oversee), and all results from his testing were compiled by an individual he could not name, who lacked experience performing such testing, and who was not listed in his Report or Materials Considered. *See generally* Ex. 1; Ex. 8 (Materials Considered). Given his lack of experience, and complete unawareness about the individual who ran the majority of his “testing,” and who was likely just one of Headwater’s counsel at Russ August & Kabat, Dr. Wesel’s testing methodology is—not surprisingly—unreliable. *Therasense*, 2008 WL 2323856, *2 (“[N]o professional should reasonably rely on such a rigged and biased source of information for any materially important fact to his or her opinion. . . [A]ny opinion based on such untested and partisan foundation is not based on sufficient facts and data within the meaning of Rule 702.”).

1. Dr. Wesel Was Not Involved in the Test Setup and Did Not Have Any Experience Running Battery Tests or With the Testing Software

Dr. Wesel was largely absent from the “battery tests” described in his Report, and the results of his test are inherently unreliable. Dr. Wesel did not purchase the phones he tested, nor does he have receipts for their purchase. *See* Ex. 2 at 40:19-41:2 (“I didn’t personally purchase

[REDACTED]

it.”), 52:1-13 (“I’m not sure where we got the S21.”), 55:1-3. Moreover, Dr. Wesel could not name who purchased the phones that were allegedly tested. *Id.* at 41:5-6 (“Q. Who purchased the phone? A. I don’t recall.”). Indeed, during deposition, Dr. Wesel merely testified that “it was a consultant” that he did not personally select to help with his testing, *id.* at 88:8-13, and whose name and employer he could not recall. *Id.* at 41:7-17. This same unnamed “consultant” also “create[d] the Google account for the device,” “download[ed] the applications onto the device,” and “purchased and enabled” the “cellular plan from AT&T . . . for the S5.”¹ *Id.* at 48:1-25 (“I asked the consultant to just take care of this[.]”). Dr. Wesel also did not install “Android Studio” onto the “Windows 10” PC used for the alleged testing. *Id.* at 49:1-9.

None of this is surprising, given Dr. Wesel’s express admissions during his deposition that “before this case,” he had never looked at Android code, *id.* at 17:11-19, had never “performed battery testing on mobile phones,” had never “done any testing on Android devices,” and had never “done any testing on any smartphones” whatsoever:

Q. . . . Before this case, had you ever performed battery life testing on mobile phones?

A. No, before this case, I had not performed battery testing on mobile phones.

Q. Before this case, had you ever done any testing on Android devices?

A. No, before this case, I hadn’t done testing on Android devices.

Q. Before this case, had you done any testing on any smartphones?

A. I don’t think so.

Id. at 38:1-14. Nor had Dr. Wesel—before this case—“ever used the Batterystats or Battery Historian software” used for his testing:

Q. *Before this case, had you ever used the Batterystats or Battery Historian*

¹ Dr. Wesel could not describe the details of the AT&T cellular plan that was purchased for the S5 phone used in his testing. Ex. 2 at 90:19-24 (“I don’t recall.”).

software?

A. *No.*

Id. at 38:25-39:2. Dr. Wesel was not sure he had even heard of that software. *Id.* at 39:3-5. Nor could he “identify any other tools that can be used to test mobile device battery consumption”:

Q. So are you aware of any other tools that are used for mobile device battery consumption testing?

A. I used these tools. Sitting here today, *I’m not sure about what the set of other options would be*, but this seemed like a great set of tools because they were the tools that Samsung used.

Id. at 40:10-15. Dr. Wesel lacks experience and qualifications necessary to offer “expert” opinions in this area, which compounds the lack of reliability of his testing and its results. *Id.* at 38:15-18. This provides sufficient basis to strike his “testing” opinions. *See Rosco, Inc. v. Mirror Lite Co.*, 506 F. Supp. 2d 137, 147 (E.D.N.Y. 2007) (striking test results where expert “ha[d] no experience in CMM testing and interpretation,” “did not observe or participate in the CMM testing,” and had never “interpreted CMM test results” or “commissioned or seen a CMM test performed”).

2. Contrary to the Misstatements in His Report, Dr. Wesel Was Not Involved in the Majority of His Alleged Testing

Dr. Wesel’s opening report falsely alleges that he performed six test runs on an S5:

- A “first run” with “Power Saving mode turned OFF,” Ex. 1, ¶ 2367;
- A “second run” with “Power Saving mode turned ON,” *id.* at ¶ 2368;
- “I then repeated the test to verify that the results from the first two runs were not anomalous...” *id.* at ¶ 2366;
- “I also performed a third and fourth run of the same test with Power Saving mode ON (Run 3) and OFF (Run 4),” *id.* at ¶ 2369; and
- “I also performed a . . . fifth and sixth run of the same test with Power Saving mode ON (Run 5) and OFF (Run 6),” *id.*

However, during his deposition, Dr. Wesel admitted that he only “performed the first two tests.”

Ex. 2 at 50:7-17. The rest were performed by the unnamed “consultant”:

Q. Okay. Can you tell me for the remainder of the tests, who ran the tests and geographically where were the tests run?

A. You know, the testing setup is pretty small. The consultant is local, so they just took it with them and ran it, you know. I guess they could have run them at their home or in an office but, you know, they just ran it somewhere else in Los Angeles because why would they have to sit in the office to do it, you know.

Q. Is it the case that *the consultant did all of the testing runs described in your report except for runs 1 and 2?*

A. *Yeah, that’s right.*

Id. at 50:21-51:9; *see also id.* at 122:9-14.

This is problematic for several reasons. First, there is **zero** evidence that the “consultant” was qualified to perform these tests. Dr. Wesel admits that he only ever had one conversation with the “consultant,” before the tests were performed, and never spoke with the “consultant” again about the alleged results or testing conditions. *Id.* at 52:20-25. Dr. Wesel could not state what academic degree the “consultant” had, *id.* at 88:21-89:1, and, despite his minimal contact with the unnamed “consultant,” testified that this was also the first time the “consultant,” who is not an expert, had ever performed such a test:

Q. How many – how many tests had this consultant done in the past on Android devices testing for battery drain?

A. *I believe this is the first time that they tested the – that he tested battery drain.*

Id. at 89:2-6.

Second, compounding the lack of evidence that the “consultant” was truly qualified to run these tests, Dr. Wesel did not bother to look into where the “consultant” performed the tests, *id.* at 50:21-51:5, and did not “inspect the precise setup the consultant used to perform the [test] runs,” *id.* at 51:11-17, 51:21-23. Nor did Dr. Wesel take any steps to ensure that the “consultant” maintained the settings properly throughout the testing procedures:

[REDACTED]

Q. Beyond giving him the instructions, did you take any steps to ensure that the consultant maintained the settings properly throughout the testing procedures?

A. *I'm not sure exactly what you wanted me to do.* I mean, *I trusted the consultant* to follow my directions.

Id. at 89:13-25.

As to the results of Dr. Wesel's testing, Dr. Wesel admitted during his deposition that the unnamed, and plainly inexperienced, "consultant" compiled the results in Appendix C to his Report, that he did nothing to check the accuracy of those numbers in most cases, and that he could not "recall" which of the "few cases" he even bothered to "check[]":

Q. ... Did you yourself use these Batterystats files in order to generate your Appendix C?

THE WITNESS: I used the results from the Batterystats files.

Q. Is that something that you compiled yourself or did the consultant do that?

THE WITNESS: *I asked the consultants to compile those results.*

Q. *Did you do anything to check to see whether the consultants had accurately compiled the numbers* from these Batterystats files into your Appendix C?

A. Yeah, *I checked a few cases.* And everything matches up.

Q. *Which cases did you check?*

A. *I don't recall.*

Ex. 3 at 286:18-287:12 (objections omitted).

* * *

Dr. Wesel's opinions on the "battery testing" described in his Report are unreliable and warrant exclusion. He had no experience with such tests, was not involved in the test setup, and did not perform the majority of the tests himself. And to the extent he was involved in two of the eight S5/S21 test runs, his involvement was limited to plugging an S5 into a computer and entering "commands into the command prompt to operate the Batterystats tool." Ex. 2 at 49:6-12. Given

[REDACTED]

that Dr. Wesel had never worked with Android code or the test software used, *id.* at 38:19-39:2, it is clear that he was simply fed the “commands” to enter. His opinions should be stricken for this reason alone. *See Callaway Golf Co. v. Acushnet Co.*, No. CIV. 06-91-SLR, 2007 WL 4165401, at *1 (D. Del. Nov. 20, 2007) (excluding test opinions where expert “neither prepared nor tested anything” and defendant “directed every aspect of these tests”).

Additionally, the “consultant”—whose name, employer, degree, and experience Dr. Wesel knew absolutely nothing about during his deposition—lacked the experience and qualifications needed to perform the at-issue testing and compile the at-issue test results. What Dr. Wesel *did* know about the “consultant” is noteworthy—he had never done battery drain testing before. Further, this “consultant” was not mentioned in Dr. Wesel’s Report, was not included in Dr. Wesel’s “Materials Considered,” and was not identified by Headwater or made available for deposition. The prejudice is clear: Samsung could not question the individual *who actually performed the tests in Dr. Wesel’s Report* about his qualifications, the test setup, the test location (apparently somewhere in Los Angeles with poor signal strength), or the test results. Headwater’s attempt to launder this unnamed “consultant’s” findings through Dr. Wesel should be rejected and the corresponding opinions stricken from Dr. Wesel’s Report. *See Therasense*, 2008 WL 2323856, at *3 (excluding “testimony and opinions about . . . tests” where expert did not “observe[] or supervise” individual that performed the test, and where plaintiff did not “permit defendants to question” the individual “who did conduct and participate in the experiments”).

B. Dr. Wesel’s Test Setup Was Substantively Flawed

1. Dr. Wesel Failed to Take Into Account Known Factors that Would Materially Impact the Rate of Battery Drain in His Testing

Given that Dr. Wesel had never before performed this type of test (and did not perform the majority of the test runs in this case), it is no surprise that his testing failed to take into account

[REDACTED]

factors that, by his own admission, materially impact the rate of battery drain of the tested devices.

First, Dr. Wesel tested a Galaxy S5, a phone released back in 2014. Ex. 1, ¶ 2362. Despite Dr. Wesel admitting in deposition that “a mobile phone’s battery performance degrade[s] over time,” Ex. 2 at 57:21-24, Dr. Wesel’s Report never indicates whether the battery used in the 10-year old S5 is new or refurbished, something that could significantly impact his “battery test.” *See generally* Ex. 1, § XIII.B. And while Dr. Wesel unequivocally stated in deposition that the battery was “new,” he could not explain how he knew that, simply stating: “I could just tell.” Ex. 2 at 53:5-54:25 (“Q. Sitting here today, *you’re not able to tell me how you understood that the battery in the S5 you used for testing was new?* Is that correct? A. *That’s correct.*”). In fact, it is highly unlikely that the tested battery was new, as the website Dr. Wesel’s “consultant” purchased it from states that new batteries for the S5 are “sold out,” and the website only guarantees that batteries have “85% of their original capacity,” something Dr. Wesel’s testing does not address. Exs. 4-5.

Second, Dr. Wesel admitted during his deposition that the phone’s signal strength could impact “power consumption for the cellular modem”—the exact metric Dr. Wesel sought to test. Ex. 2 at 73:2-20. Yet, his testing failed to account for “signal strength”:

Q. What was the signal strength of the phone when you performed your testing in Los Angeles?

A. *I did not take that measurement.*

Q. What was the signal strength on the phone when the consultant performed the tests in the additional runs that you were not present for?

A. Again, *that’s not a test result that I -- that I measured.*

Id. at 76:1-8. Dr. Wesel had assumed a strong signal for his tests based on his misunderstanding that cellular coverage throughout Los Angeles was excellent. Ex. 2 at 75:16-76:12. This is a problem on multiple levels. Not only did Dr. Wesel undermine his and the “consultant’s” testing by failing to measure something that he admitted would affect the results, but he was actually

[REDACTED]

confronted at deposition with the fact his own data shows that during the majority of his testing, “signal strength” was “poor.” Ex. 3 at 284:8-285:18.

Finally, Dr. Wesel failed to account for temperature’s impact on his testing. Specifically, Dr. Wesel admitted during his deposition that “temperature is a factor in battery performance” and that “when a battery is warmer, it can be less efficient.” Ex. 2 at 95:5-18. Moreover, Dr. Wesel conceded that even though “keeping the screen on[,] on your phone for an hour increase[s] the temperature of the device,” *id.* at 95:2-4, “the screen was kept on during the entire test” that he ran, *id.* at 94:17-95:1. In other words, Dr. Wesel intentionally caused the tested device to increase in temperature, which would make the battery less efficient, when running his “battery tests.” *Id.* None of this is taken into account in Dr. Wesel’s Report.

**2. Dr. Wesel Repeatedly Deviated From the [REDACTED]
[REDACTED] He Purported to Rely On**

Dr. Wesel’s Report describes third-party battery testing of Samsung [REDACTED]
[REDACTED]
[REDACTED] Ex. 1, ¶ 2363. According to Dr. Wesel’s Report, his “testing” involved looking at “cellular radio usage while running in the background the applications in the [REDACTED] *Id.* at ¶ 2365. However, during his deposition, Dr. Wesel was repeatedly confronted with his testing’s deviations from the [REDACTED] (which is not even relevant for phones released after 2015). For example, Dr. Wesel admitted that he failed to download the same applications described in the [REDACTED]. Ex. 2 at 81:23-82:2, 85:7-10. Dr. Wesel turned the device’s Wi-Fi off despite the [REDACTED]. *Id.* at 83:24-84:15. Dr. Wesel turned Power Saving Mode (i.e., battery saving) on [REDACTED] *Id.* at 86:17-87:5. The [REDACTED] *id.* at 93:1-6, but Dr. Wesel’s testing did not, *id.* at 76:1-8. Finally, while the [REDACTED],

Dr. Wesel tested the Galaxy S5 for just one-hour and multiplied it by a factor of nine, Ex. 1, ¶ 2368, because he apparently could not be bothered to run his test for a nine-hour period or a day, Ex. 2 at 105:9-13 (“Q. . . . Why did you choose to run each of your test runs for only one hour as opposed to running them for nine hours? A. It’s just a question of efficiency.”).

C. Dr. Wesel Inappropriately Projects the Results of his “Battery Testing” from One Phone (i.e., Galaxy S5) and One Feature (i.e., Power Saving Mode) to Dozens of Distinct Phones and Features

1. Dr. Wesel Failed to Account for Differences in the Accused Products’ Power Profiles, Modems, [REDACTED], Which Dr. Wesel Admits Would Impact the Rate at Which the Battery is Drained Across Products

Dr. Wesel applied his highly unreliable “test results for the S5 . . . to each of the accused products” simply by dividing the alleged battery savings “by the appropriate battery capacity.” Ex. 1, ¶¶ 2368-70. This is insufficient, unscientific, and unreliable for a number of reasons.

First, Dr. Wesel admits that the Batterystats tool used to perform his testing “relies on the power profile XML file that exists on the accused devices which indicates the manufacturer’s specified values for how much the cellular modem in each component drains the battery when in use.” Ex. 3 at 288:20-289:12. And he admits that “the power profile XML files vary across the different accused models.” *Id.* at 289:23-25. Despite this, he only “used the power profile for the model” that he tested (which was a decade old), *id.* at 289:14-21, and did not “take into account the differences in power profiles that would exist on the additional models as compared to the S5” when he “applied the test results for the S5 to each of the Accused Products,” *id.* at 292:15-24. In other words, the software Dr. Wesel used to perform his testing required a “power profile” unique to the tested device, and despite the fact that the “power profile” would be different across devices, Dr. Wesel projected the test results for an older and less efficient S5 to every other (newer) Accused Product without taking their “power profiles” into account. This skewed his results.

Second, Dr. Wesel admits that different Accused Products have different cellular modems

[REDACTED]

and that different cellular modems would drain batteries at different rates:

Q. Would you agree that the cellular modems across the model -- across the various accused models are not the same?

A. Yes, I think that's -- that's true.

Q. Do you agree that different models of cellular modems could drain the battery at different rates?

A. Yes, that's also possible.

Id. at 293:2-9. Yet, Dr. Wesel failed to account for the different rates at which the various Accused Products' cellular modems drain battery (and the fact that newer phones are more efficient) when projecting the results for the S5 (a 10-year old device) to other newer devices.

Finally, Dr. Wesel "used the same [REDACTED] across all of the tests," despite the fact that "there would have been a number of updates to the [REDACTED]" over time. *See* Ex. 2 at 67:16-68:5. Dr. Wesel's testing failed to take into account differences in the [REDACTED] that would have existed at the times when phones other than the tested S5 would have been released. *Id.* Certainly, the [REDACTED]

[REDACTED]

2. Dr. Wesel Failed to Properly Account for Differences in How the Accused Features Operate Before Projecting any Alleged Battery Saving Benefits of One Feature to Another

Next, despite only testing the *Power Saving Mode* feature, Dr. Wesel states that his "battery testing results also indicate the battery savings provided by the patented technology as it has been implemented for the *Doze and App Standby / Adaptive Battery features*," as well as *Data Saver*. Ex. 1, ¶¶ 2372-78. Dr. Wesel did not test any of these other accused features, all of which have different triggers that would cause them to block network access at different times/rates. *See generally id.* at § XIII.B. For example, the Accused Products exit Doze mode if the device is moved (i.e., if it is no longer stationary). *Id.* at ¶ 108; Ex. 3 at 164:7-165:2. Yet, despite the fact

[REDACTED]

that people routinely “move” their phone, even in their pocket, Dr. Wesel’s test left the device undisturbed and stationary on a table for an hour. Given that Dr. Wesel artificially projected his one-hour test across a nine-hour period, as explained by Dr. Schonfeld, Dr. Wesel’s opinion “rests entirely upon the assumption that the user does not touch or move their device for the entire 9-hour period.” Ex. 6, ¶ 625.

D. Dr. Wesel Failed to Compare the Alleged Battery Saving Benefits of “Power Saving Mode” to the Prior Art’s Already-Existing Battery Saving Features

Finally, as explained by Dr. Schonfeld, “Dr. Wesel fails to establish any direct connection between the results of his flawed tests and the actual limitations of Asserted Patents’ claims.” Ex. 6, ¶ 611. Dr. Wesel’s Report explains that his testing attempted to “show the difference in cellular radio modem battery consumption both with and without” a “policy that disallows background applications not interacting with the user in the device user interface foreground from accessing the cellular network through the cellular WWAN radio modem.” Ex. 1, ¶ 2362. But, as Dr. Schonfeld explained, “restricting background applications’ access to a cellular network . . . was not the inventive concept of any Asserted Patent.” Ex. 6, ¶ 611 (citing Ex. 7 at 61:11-64:20 (refusing to state that Headwater came up with the idea of preventing an application operating in the background from accessing a wireless WAN network)). “Thus, at best, Dr. Wesel’s testing appears to be directed to the purported benefits already provided by the prior art . . . and not any improvements in battery life over the prior art due to the practice of any Asserted Claims.” *Id.* His testing, which at best demonstrates the benefits of prior art technology, cannot be attributed to the asserted patent claims. Dr. Wesel’s opinion, making that precise attribution, should be stricken.

V. CONCLUSION

For the foregoing reasons, Samsung respectfully asks that the Court grant its motion and strike paragraphs 2362-81 and Appendix C of Dr. Wesel’s Report relating to “battery testing.”

Dated: May 10, 2024

Respectfully submitted,

By: /s/ Jared Hartzman

Ruffin B. Cordell
TX Bar No. 04820550
Michael J. McKeon
DC Bar No. 459780
mckeon@fr.com
Jared Hartzman (*pro hac vice*)
DC Bar No. 1034255
hartzman@fr.com
FISH & RICHARDSON P.C.
1000 Maine Avenue, SW, Ste 1000
Washington, D.C. 20024
Telephone: (202) 783-5070
Facsimile: (202) 783-2331

Thad C. Kodish
GA Bar No. 427603
tkodish@fr.com
Benjamin K. Thompson
GA Bar No. 633211
bthompson@fr.com
Nicholas A. Gallo (*pro hac vice*)
GA Bar No. 546590
gallo@fr.com
Steffen Lake (*pro hac vice*)
GA Bar No. 512272
lake@fr.com
Sara Fish
sfish@fr.com
GA Bar No. 873853
Noah C. Graubart
GA Bar No. 141862
graubart@fr.com
Katherine H. Reardon
NY Bar No. 5196910
reardon@fr.com
FISH & RICHARDSON P.C.
1180 Peachtree St. NE, Fl. 21
Atlanta, GA 30309
Telephone: (404) 892-5005
Facsimile: (404) 892-5002

Leonard E. Davis
TX Bar No. 05521600
ldavid@fr.com
Andria Rae Crisler
TX Bar No. 24093792
crisler@fr.com
Thomas H. Reger II
Texas Bar No. 24032992
reger@fr.com
FISH & RICHARDSON P.C.
1717 Main Street, Suite 5000
Dallas, TX 75201
Telephone: (214)747-5070
Facsimile: (214) 747-2091

John-Paul R. Fryckman (*pro hac vice*)
CA Bar No. 317591
FISH & RICHARDSON P.C.
12860 El Camino Real, Ste. 400
San Diego, CA 92130
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

Melissa R. Smith
State Bar No. 24001351
Melissa@gillamsmithlaw.com
Harry L. Gillam, Jr.
State Bar No. 07921800
gil@gillamsmithlaw.com
GILLAM & SMITH, LLP
303 South Washington Avenue
Marshall, Texas 75670
Telephone: (903) 934-8450
Facsimile: (903) 934-9257

Andrew Thompson (“Tom”) Gorham
State Bar No. 24012715
tom@gillamsmithlaw.com
GILLAM & SMITH, LLP
102 N. College, Ste. 800
Tyler, Texas 75702
Telephone: (903) 934-8450
Facsimile: (903) 934-9257

Grant Schmidt



Texas Bar No. 24084579
gschmidt@hilgersgraben.com
Jon Hyland
jhyland@hilgersgraben.com
Texas Bar No. 24046131
Theodore Kwong
tkwong@hilgersgraben.com
Texas Bar No. 4087871
HILGERS GRABEN PLLC
7859 Walnut Hill Lane, Suite 335
Dallas, Texas 75230
Telephone: 469-751-2819

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing document was served on Plaintiff through its counsel of record via email on May 10, 2024.

/s/ Jared Hartzman
Jared Hartzman

CERTIFICATE OF CONFERENCE

The undersigned hereby certifies that counsel for Defendants have complied with the meet and confer requirement in Local Rule CV-7(h). This motion is opposed. The personal conference required by Local Rule CV-7(h) was conducted on May 9, 2024. The parties were unable to reach agreement as to Samsung's requested relief.

/s/ Jared Hartzman
Jared Hartzman

CERTIFICATE OF AUTHORIZATION TO SEAL

The undersigned hereby certifies that pursuant to the protective order in the above-captioned case, this document contains confidential information. Accordingly, this document is to be filed under seal.

/s/ Jared Hartzman
Jared Hartzman